

REMARKS

This amendment is submitted in response to the Office Action mailed July 29, 2003. Favorable reconsideration of the application is respectfully requested in view of the amendments and the following remarks.

Basis for the New Claims

The new claims have basis in the specification as follows. Claim 2 is a rewording of original claim 1. Claims 3, 4, 13 and 14 have basis at page 2, lines 2-3. Claims 5 and 15 have basis at page 6, lines 7-10. Claims 6 and 16 have basis at page 5, lines 15-17. Claims 8 and 17 have basis at page 2, lines 3-6. Claim 9 has basis in original claim 1 and at page 3, lines 2-6. Claim 10 has basis at page 4, lines 3-11. Claim 11 has basis at page 4, lines 12-14. Claim 12 has basis at page 4, line 24 to page 5, line 2.

Response to Claim Rejection

Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (USP 4,895,727). Allen discloses a method of inducing a reservoir effect in the skin and mucous membranes to enhance penetration and retention of topically applied therapeutic and cosmetic compositions. The method involves adding to the compositions a water-soluble zinc-containing compound, such as zinc halide, zinc sulfate, zinc nitrate, zinc acetate, zinc stearate, and/or zinc chloride. The zinc-containing compounds provide zinc ions for complexation or chelation with the pharmacologically active agents present in the compositions. This complexation or chelation is believed to provide the reservoir effect in which the composition has enhanced penetration and retention on the skin and mucous membranes, but the composition is prevented from penetrating past the skin and mucous membranes. The pharmacologically active agent can be benzoyl peroxide for the treatment of acne (col. 5, lines 36-37) or dapsone (claim 21).

Applicant respectfully submits that the claimed invention is nonobvious in view of the Allen patent. Allen neither teaches nor suggests applying a combination of a peroxide and a tertiary amine to the skin, as recited in claim 2. As noted by the Examiner, Allen discloses a combination of a zinc-containing compound and benzoyl

peroxide. However, the zinc-containing compound is not a tertiary amine as required by the claim.

Moreover, the zinc-containing compound is added to provide a reservoir effect, in which the benzoyl peroxide penetrates and is retained in the skin but does not penetrate past the skin into the interior of the body. There is no suggestion in the Allen patent of increasing the efficacy of the peroxide by increasing the radicals formed by the peroxide on/in the skin, as recited in claim 2. In contrast to the Allen invention, the radicals formed in the claimed invention have a very short half-life, usually less than one second, and thus they are not retained on the skin.

The Examiner also noted that Allen discloses dapsone as a pharmacologically active agent. However, dapsone is not being claimed by Applicant. Dapsone is mentioned at page 6, lines 13-21 of the specification for combining with a peroxide as an alternative to combining a tertiary amine with the peroxide. The dapsone is thought to increase the efficacy of the peroxide by a mechanism that is different from increasing the radicals formed. Further, there is no suggestion in the Allen patent of combining with dapsone with the benzoyl peroxide.

Furthermore, Allen neither teaches nor suggests the method recited in claim 9: applying a combination of a peroxide and a tertiary amine to the skin, the tertiary amine increasing radicals formed by the peroxide on/in the skin to thereby increase the efficacy of the peroxide in the treatment of a skin condition, wherein the peroxide and the tertiary amine are combined in a manner such that the radicals are formed on/in the skin and not prior to application of the peroxide and the tertiary amine to the skin. As discussed above, there is no suggestion in the Allen patent of applying a combination of a peroxide and a tertiary amine to the skin. There is no suggestion of increasing the efficacy of the peroxide by increasing radicals formed on/in the skin. In particular, there is no suggestion to combine a peroxide and a tertiary amine in a manner such that the radicals are formed on/in the skin and not prior to application of the peroxide and the tertiary amine to the skin. There is no hint in the Allen patent of intentionally delaying a reaction between ingredients of the compositions so that the reaction occurs on the skin, and not prior to application to the skin. The ingredients in the Allen

patent are simply mixed together and stored together as a composition prior to applying the composition to the skin.

In view of the above, Applicant respectfully submits that the claimed invention is patentable over the Allen patent.